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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	10/669,141
Filing Date	September 23, 2003
First Named Inventor	Milan Kokta
Art Unit	1775
Examiner Name	Stephen J. Stein
Attorney Docket Number	1035-BI4282

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
SSS	AA	US- 3,625,868	12/07/1971	Grabmaier et al.	
SSS	AB	US- 3,736,158	05/29/1973	Cullen et al.	
SSS	AC	US- 3,816,906	06/18/1974	Falckenberg	
SSS	AD	US- 3,883,313	05/13/1975	Cullen et al.	
SSS	AE	US- 3,885,978	05/27/1975	Doi et al.	
SSS	AF	US- 3,990,902	11/09/1976	Nishizawa, et al.	
SSS	AG	US- 3,950,504	04/13/1976	Belding et al.	
SSS	AH	US- 4,370,739	01/25/1983	Wang et al.	
SSS	AI	US- 4,755,314	07/05/1988	Sakaguchi et al.	
SSS	AJ	US- 5,138,298	08/11/1992	Shino	
SSS	AK	US- 5,850,410	12/15/1998	Kuramata	
SSS	AL	US- 6,533,874 B1	03/18/2003	Vaudo et al.	
SSS	AM	US- 2003/0188678 A1	10/09/2003	Kokta et al.	
SSS	AN	US- 6,839,362 B2	01/05/2005	Kokta et al.	
SSS	AO	US- 6,844,084 B2	01/18/2005	Kokta et al.	
SSS	AP	US- 3,424,955	01/28/1969	Selter et al.	
SSS	AQ	US- 5,557,624	09/17/1996	Stultz, et al.	
SSS	AR	US- 6,366,596	04/02/2002	Yin, et al.	
SSS	AS	US- 6,023,479	02/08/2000	Thony, et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
SSS	AT	FR 1,471,976	03/24/1966	Siemens Aktiengesellsc.	Corr. 3,424,955	
SSS	AU	JP 11-157997	06/15/1999	Kyocera Corporation	Abstract Only	
SSS	AV	JP 09-278595	10/28/1997	Sumitomo Elect. Ind. Ltd.	Abstract Only	
SSS	AW	JP 62-188325	08/17/1987	Sumitomo Elect. Ind. Ltd.	Abstract Only	
SSS	AX	JP 58-211736	12/09/1983	Toshiba Corporation	Abstract Only	
SSS	AY	JP 07-307316	11/21/1995	Sumitomo Elect. Ind. Ltd.	Abstract Only	

Examiner Signature		Date Considered	5/26/2005
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/669,141
		Filing Date	September 23, 2003
		First Named Inventor	Milan R. Kokta
		Art Unit	1775
		Examiner Name	Stephen J. Stein
Sheet 2 of 5	Attorney Docket Number	1035-BI4282	

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		Number-Kind Code ² (if known)			
SSS	BA	US- 4,963,520	10/16/1990	Yoo, et al.	
SSS	BB	US- 5,982,796	11/09/1999	Kokta, et al.	
SSS	BC	US- 5,654,973	08/05/1997	Stultz, et al.	
SSS	BD	US-			
SSS	BE	US-			
	BF	US-			
	BG	US-			
	BH	US-			
	BI	US-			
	BJ	US-			
	BK	US-			
	BL	US-			
	BM	US-			
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	BO	US-			
	BP	US-			
	BQ	US-			
	BR	US-			
	BS	US-			

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SSS	BT	EP 0 263 171 B1	11/25/1992	UOP		
SSS	BU	EP 0 762 930 B1	07/12/2000	BP Amoco Corporation		
✓	BV	WO 01/99155 A2	12/27/2001	Nichia Corporation		
✓	BW	WO 02/095887 A2	11/28/2002	SG Ceramics & Plastics, Inc.		
	BX					
	BY					

Examiner Signature	<i>Stephen J. Stein</i>	Date Considered	5/26/2005
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
SSS	CA	Efimov, A.N., et al., "On an Unusual Azimuthal Orientation Relationship in the System Gallium Nitride Layer on Spinel Substrate", CRYSTALLOGRAPHY REPORTS, 45(2): 312-317 (2000).	
SSS	CB	Sun C.J., et al., "Mg-doped green light emitting diodes over cubic (1 1 1) MgAl ₂ O ₄ substrate", APP. PHYS. LETT. 72(19): 2361-2363 (1998).	
SSS	CC	Efimov, A.N., et al., "Symmetry constraints and epitaxial growth on non-isomorphic substrate", THIN SOLID FILMS 260: 111-117 (1995).	
SSS	CD	George, T., et al., "Novel symmetry in the growth of gallium nitride on magnesium aluminate substrates", APPL. PHYS. LETT. 68(3): 337-339 (1996).	
SSS	CE	Sun C.J., et al., "Deposition of high quality wurtzite GaN films over cubic (1 1 1) MgAl ₂ O ₄ substrates using low pressure and metalorganic chemical vapor deposition, " APPL. PHYS. LETT. 68(8): 1129-1131 (1996).	
SSS	CF	Nakamura, S., et al., "Characteristics of InGaN multi-quantum-well-structure laser diodes, " APPL. PHYS. LETT. 68(23): 3269-3271 (1996).	
SSS	CG	Khan, M.A., et al., "Cleaved cavity optically pumped InGaN-GaN laser grown on spinel substrates," APPL. PHYS. LETT. 69(16): 2418-2420 (1996).	
SSS	CH	Tempel, A., et al., "Nachweis von Stapelfehlern in GaN-Exitaxieschichten mittels Elektronenbeugung," KRISTALL UND TECHNIK 10(7): 741-746 (1975).	
SSS	CI	Tempel, A., et al., "Zur Epitaxie von Galliumnitride auf nichtstoechiometrischem Spinell im System GaC1/NH3/He, " KRISTALL UND TECHNIK 10(7): 747-758 (1975)	
SSS	CJ	K.V. Yumashev, "Saturable absorber Co ²⁺ : MgAl ₂ O ₃ crystal for Q switching of 1.34-um Nd ³⁺ : YAlO ₃ and 1.54-um Er ³⁺ : glass lasers," APPLIED OPTICS 38(30): 6343-6346 (1999).	

Examiner Signature		Date Considered	5/26/2005
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SJS	DA	Giess et al., "Growth of Single Crystal MgGa ₂ O ₄ Spinel", IBM TECHNICAL DISCLOSURE BULLETIN, Vol. 15, no. 1, June 1972, pgs 151-152, XP-002315746.	
SJS	DB	Anon., "Spinel Crystals for Electronic Devices", MANUFACTURING TECHNOLOGY NOTE, Vol. NTN-77, no. 0735, April 1977, XP-002315747.	
SJS	DC	Grabmaier et al., "Czochralski Growth of Magnesium-Aluminum Spinel", J. AMERICAN CERAMIC SOCIETY, Vol. 51, no. 6, June 1968, pgs 355-356, XP-002315185.	
88S	DD	Wyon et al., "Czochralski Growth and Optical Properties of Magnesium-Aluminum Spinel Doped with Nickel", JOURNAL OF CRYSTAL GROWTH, NORTH-HOLLAND PUBLISHING CO. AMSTERDAM, NL, Vol. 79, no. 1-3, part 2, 1986, pgs 710-713, XP-002250057.	
SJS	DE	Pinckney, L.R., "Transparent, high strain point spinel glass-ceramics", JOURNAL OF NON-CRYSTALLINE SOLIDS, Vol. 255, pp. 171-177, 1999.	
SJS	DF	Nakamura, S. "Current Status and Future Prospects of InGa _N -Based Laser Diodes", ISAP INTERNATIONAL, Vol. 1, pgs. 5-17, 2000.	
SJS	DG	Kisailus D., et al., "Growth of Epitaxial GaN of LiGaO ₂ Substrates Via a Reaction With Ammonia", J. MATER. RES., Vol. 16, no. 7, pgs 2077-2081, 2001.	
SJS	DH	Nakamura, S., et al., "InGa _N MQW LDs Grown on MgAl ₂ O ₄ Substrates," In THE BLUE LASER DIODE, (NY: Springer-Verlag), pp. 233-243, 1997 (update included).	
88S	DI	Mordoc, H., et al., "Large-band-gap SiC, III-V nitride, and II-VI ZnSe-based Semiconductor Device Technologies", J. APPL. PHYS., Vol. 76, no. 3, pgs 1363-1398, 1994.	
SJS	DJ	Yumashev, K.V., et al., "Nonlinear spectroscopy and passive Q-switching operation of a Co ²⁺ : LaMgAl ₁₁ O ₁₉ crystal," J. OPT. SOC. AM. B., 16(12): 2189-2194 (1999).	

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SSS	EA	Camargo, M.B., et al., "Co2+ Y3Sc2Ga3O12 (YSGG) Passive Q-Switch for Infrared Erbium Lasers," submitted to LEOS in 1994.	
SSS	EB	Mikhailov, V.P., et al., "Passive Q-switch performance at 1.3u (1.5u) and nonlinear spectroscopy of Co2+: MgAl2O4 and Co2+: LaMgAl11O9 crystals," OSA TOPS VOL. 26 Advanced Solid-State Lasers, pp. 317-324 (1999).	
SSS	EC	Stulz, R.D., et al., "Divalent Uranium and Cobalt Saturable Absorber Q-Switches at 1.5um," OSA Proceedings on Advanced Solid-State Lasers, 24:460-464 (1995).	
SSS	ED	Birnbaum, M., et al., "Co2+: ZnSe Saturable Absorber Q-Switch for the 1.54 Um Er3+: Yb3+: Glass Laser," OSA TOPS Vol. 10 Advanced Solid State Lasers, pp. 148-151 (1997).	
SSS	EE	Machida, H., et al., "difficulties encountered during the Czochralski growth of TiO2 single crystals," JOURNAL OF CRYSTAL GROWTH, 112: 835-837 (1997).	
SSS	EF	Camargo, M.B., et al., "Broad-band 1.54 um Saturable Absorber Q-switch with Co2+, " submitted to ASSL in 1995.	
	EG		
	EH		
	EI		
	EJ		

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